INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

March 2, 2004

TO: Interested Parties / Applicant

RE: Master Guard Corporation / SPM 045-18180-00011

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval – Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impractible to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
401 M Street
Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNTV-PMOD.doc 9/16/03

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March 2, 2004

Mr. Scott Quartier
Master Guard Corporation
502 East Anthony Drive
Urbana, IL 61802

Re: 045-18180
Significant Permit Modification to
Part 70 Permit No.: 045-10130-00011

Dear Mr. Quartier:

Master Guard Corporation was issued a Part 70 permit on April 23, 2001, for the operation of a stationary automotive bumper manufacturing plant. An application to modify the source was received by the Office of Air Quality (OAQ) on October 07, 2003. Pursuant to the provisions of 326 IAC 2-7-12, a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification is as follows:

(a) Two (2) anti-chip coat booths, together identified as P-1-5 in production line 1, with a maximum capacity of 180 nominal parts per hour, equipped with dry filters DF-1-5A and DF-1-5B, and exhausting through stack S-1-5;

(b) Two (2) anti-chip coat booths, together identified as P-2-6 in the production line 2, with a maximum capacity of 180 nominal parts per hour, equipped with dry filters DF-2-6A and DF-2-6B, and exhausting through stacks S-2-6A and S-2-3B; and

(c) Two (2) 2.5 MMBtu/hr natural gas-fired curing ovens.

The changes made in the Part 70 Operating Permit are presented in the attached Technical Support Document. All other conditions of the permit shall remain unchanged and in effect. A complete copy of the modified permit is attached.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Rajesh Thotakura, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or at 973-575-2555, extension 3216, or dial 1-800-451-6027, and ask for extension 3-6878.

Sincerely,

Original signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
RT / EVP

c: File - Fountain County
U.S. EPA, Region V
Fountain County Health Department
Air Compliance Section Inspector - Jim Thorpe
Compliance Data Section - Karen Ambil
Administrative and Development
Technical Support and Modeling - Michele Boner

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PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

MasterGuard Corporation
1200 East Eighth Street
Veedersburg, IN 47987

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T045-10130-00011	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: April 23, 2001 Expiration Date: April 23, 2006

First Minor Source Modification No.: MSM 045-10663-00011 Second Minor Source Modification No.: MSM 045-11822-00011 First Administrative Amendment No.: 045-15667-00011	Date Issued: May 21, 1999 Date Issued: March 15, 2000 Date Issued: March 11, 2002

First Significant Permit Modification No.: 045-18180-00011	Pages Modified: 3, 4, 6, 27, 28a, 29, 30, and 31

Issued by: Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: March 2, 2004

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
C.12 Monitoring Methods [326 IAC 3]

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
C.14 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]
C.15 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5]
C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]
C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]
C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)][326 IAC 2-1.1-11]

Stratospheric Ozone Protection

C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

D.1 FACILITY OPERATION CONDITIONS - Paint booths

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Miscellaneous Metal Coating [326 IAC 8-2-9]
D.1.2 General Provisions Relating to HAPs [326 IAC 20-1][40 CFR Part 63, Subpart A] [Table 2 to 40 CFR Part 63, Subpart MMMM] [40 CFR 63.3901]
D.1.3 National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products [40 CFR Part 63, Subpart MMMM] [40 CFR 63.3882] [40 CFR 63.3883] [40 CFR 63.3980]
D.1.4 PSD Minor Limit [326 IAC 2-2][40CFR 52.21]
D.1.5 Particulate Matter (PM) [326 IAC 6-3-2(c)]
D.1.6 Particulate [326-IAC-6-3-2 (d)]
D.1.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

D.1.8 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]
D.1.9 Volatile Organic Compounds (VOC)
D.1.10 VOC Emissions

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.11 Monitoring

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.12 Record Keeping Requirements
D.1.13 Notification Requirements [40 CFR 63.3910]
D.1.14 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5
D.1.15 Reporting Requirements

D.2 FACILITY OPERATION CONDITIONS - Two boilers

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-2-4]
D.2.2 Preventive Maintenance [326 IAC 2-7-5(13)]

(h) Two clearcoat booths, together identified as P-2-3 in production line 2, with a maximum total capacity of 180 nominal parts per hour, equipped with two dry filters DF-2-3A and DF-2-3B, and exhausting through stacks S-2-3A and S-2-3B

(i) An undercoat spray booth, identified as P-2-4, with a maximum capacity of 180 nominal parts per hour, equipped with a dry filter DF-2-4, and exhausting through stack S-2-4

(j) Two decorative chrome plating tanks, identified as CN-1 and CS-1, each with a maximum capacity of 180 nominal bumpers per hour, using fume suppressant and scrubbers SCN-1 and SCS-1 as control and exhausting through stack S-3-1. Operation of the scrubber is not required for compliance.

(k) Two (2) spray booths applying clear undercoatings, identified as emission units P-2-5A and P-2-5B, each with a maximum capacity of 180 nominal parts per hour, with particulate matter emissions controlled by dry filters, and exhausting from stack vents S-2-5A and S-2-5B, respectively

(l) Two chrome anodizing tanks, identified as CN-25 and CS-25, each with a maximum capacity of 90 nominal bumpers per hour, using a wetting agent and scrubbers SCN-1 and SCS-1 as control and exhausting through stack S-3-1. Operation of the scrubber is not required for compliance.

(m) Two (2) anti-chip coat booths, together identified as P-1-5 in production line 1, with a maximum capacity of 180 nominal parts per hour, equipped with dry filters DF-1-5A and DF-1-5B, and exhausting through stack S-1-5; and

(n) Two (2) anti-chip coat booths, together identified as P-2-6 in the production line 2, with a maximum capacity of 180 nominal parts per hour, equipped with dry filters DF-2-6A and DF-2-6B, and exhausting through stacks S-2-6A and S-2-3B.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) One (1) spray booth, identified as P-2-5C, with a capacity of 80 parts per hour, equipped with a High Volume Low Pressure (HVLP) spray system, with PM overspray emissions controlled by dry filters, and with VOC emissions less than 10 tons/year and PM emissions less than 5 tons/year. [326 IAC 6-3-2(c)]

(b) Degreasing operations, i.e. 2 Safety Kleen parts washers, that do not exceed 145 gallons per 12 months, volatility of the solvents is less than 15 mm Hg at 38^{o}C, solvents are not agitated or heated, and not subject to 326 IAC 20-6 [326 IAC 8-3-5]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(a) An electrodeposition dip coat process, identified as P-1-1 in production line 1, with a maximum capacity of 180 nominal parts per hour, and internally vented

(b) Two clearcoat booths, together identified as P-1-3 in production line 1, with a maximum total capacity of 180 nominal parts per hour, equipped with two dry filters DF-1-3A and DF-1-3B, and exhausting through stacks S-1-3A and S-1-3B

(c) An undercoat spray booth, identified as P-1-4, with a maximum capacity of 180 nominal parts per hour, equipped with a dry filter DF-1-4, and exhausting through stack S-1-4

(e) Two basecoat spray booths, together identified as P-1-2 in production line 1, with a total maximum capacity of 180 nominal parts per hour, equipped with two dry filters DF-1-2A and DF-1-2B, and exhausting through stacks S-1-2A and S-1-2B

(f) An electrodeposition dip coat process, identified as P-2-1 in production line 2, with a maximum capacity of 180 nominal parts per hour, and internally vented

(g) Two basecoat spray booths, together identified as P-2-2 in production line 2, with a maximum total capacity of 180 nominal parts per hour, equipped with two dry filters DF-2-2A and DF-2-2B, and exhausting through stacks S-2-2A and S-2-2B

(h) Two clearcoat booths, together identified as P-2-3 in production line 2, with a maximum total capacity of 180 nominal parts per hour, equipped with two dry filters DF-2-3A and DF-2-3B, and exhausting through stacks S-2-3A and S-2-3B

(i) An undercoat spray booth, identified as P-2-4, with a maximum capacity of 180 nominal parts per hour, equipped with a dry filter DF-2-4, and exhausting through stack S-2-4

(j) Two (2) spray booths applying clear undercoatings, identified as emission units P-2-5A and P-2-5B, each with a maximum capacity of 180 nominal parts per hour, with particulate matter emissions controlled by dry filters, and exhausting from stack vents S-2-5A and S-2-5B, respectively

(k) Two (2) anti-chip coat booths, together identified as P-1-5 in production line 1, with a maximum capacity of 180 nominal parts per hour, equipped with dry filters DF-1-5A and DF-1-5B, and exhausting through stack S-1-5; and

(l) Two (2) anti-chip coat booths, together identified as P-2-6 in the production line 2, with a maximum capacity of 180 nominal parts per hour, equipped with dry filters DF-2-6A and DF-2-6B, and exhausting through stacks S-2-6A and S-2-3B

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 326 IAC 8-2-9 (Miscellaneous Metal Coating)

(a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) and 326 IAC 8-1-2(a)(7) (VOC Compliance methods), compliance with VOC content of 4.3 pounds of VOC

per gallon of coating less water for all clear coatings applied in each spray booth P-1-4, P-2-4, P-2-5A, and P-2-5B shall be based on daily volume-weighted averages, using the following equation:

A = ? (C * U) / ? U ? 4. 3 lb VOC/gal

A = Daily volume weighted average in pounds of VOC per gallon of coating, less water
C = VOC content of coating in pounds of VOC per gallon of coating, less water
U = usage rate of coating in gallons per day

Compliance with VOC content of 3.5 pounds of VOC per gallon of coating less water for all non-clear or air-dried coatings delivered at spray booth P-1-4 shall be based on daily volume-weighted averages, using the following equation:

A = ? (C * U) / ? U ? 3.5 lb VOC/gal

A = Daily volume weighted average in pounds of VOC per gallon of coating, less water
C = VOC content of coating in pounds of VOC per gallon of coating, less water
U = usage rate of coating in gallons per day

(b) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) and 326 IAC 8-1-2(a)(7) (VOC Compliance methods), compliance with VOC content of 3.5 pounds of VOC per gallon of coating less water for all extreme performance coatings applied in spray booths P-1-2, P-2-2, P-1-5 and P-2-6 and electrodeposition dip booths P-1-1 and P-2-1, and a VOC content of 4.3 pounds of VOC per gallon of coating less water for all clearcoatings applied in spray booths P-1-3 and P-2-3, shall be based on daily volume-weighted averages, using the following equations:

For Line 1:

? (C_a * U) ? ? (C_l * U)

C_a = actual VOC content of coating in pounds of VOC per gallon of coating, less water
C_l = limited VOC content of coating in pounds of VOC per gallon of coating, less water
P-1-1 limit is 3.5 lb/gal P-1-2 limit is 3.5 lb/gal P-1-3 limit is 4.3 lb/gal P-1-5 limit is 3.5 lb /gal

U = actual usage rate of coating in gallons per day

For Line 2:

? (C_a * U) ? ? (C_l * U)

C_a = actual VOC content of coating in pounds of VOC per gallon of coating, less water
C_l = limited VOC content of coating in pounds of VOC per gallon of coating, less water
P-2-1 limit is 3.5 lb/gal P-2-2 limit is 3.5 lb/gal P-2-3 limit is 4.3 lb/gal P-2-6 limit is 3.5 lb/ gal

U = actual usage rate of coating in gallons per day

(c) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

(d) The requirement from CP 045-2458, issued April 6, 1992,

" The VOC content of the coating delivered to the applicator shall not exceed 3.5 pounds per gallon, less water, pursuant to the rule"

is not applicable because the applicators are delivering different coatings than those to which the requirement referred. Conditions D.1.1. (a) and (b) satisfy the requirements of 326 IAC 8-2-9.

D.1.2 General Provisions Relating to HAPs [326 IAC 20-1][40 CFR Part 63, Subpart A] [Table 2 to 40 CFR Part 63, Subpart MMMM] [40 CFR 63.3901]

(a) The provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to affected source (all the paint booth facilities identified in Facility Description D.1), except when otherwise specified by Table 2 to 40 CFR Part 63, Subpart MMMM. The Permittee must comply with these requirements on and after the effective date of the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products.

(a) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.

D.1.3 National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products [40 CFR Part 63, Subpart MMMM] [40 CFR 63.3882] [40 CFR 63.3883] [40 CFR 63.3980]

(a) The provisions of 40 CFR Part 63, Subpart MMMM (National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products) apply to affected source (all the paint booth facilities identified in Facility Description D.1). A copy of this rule is available on the US EPA Air Toxics Website at http://www.epa.gov/ttn/atw/misc/miscpg.html. Pursuant to 40 CFR 63.3883(b), the Permittee must comply with these requirements on and after the date 3 years after the effective date of 40 CFR Part 63, Subpart MMMM.

(b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.

(c) The affected source is the collection of all of the items listed in 40 CFR 63.3882, paragraphs (b)(1) through (4) that are used for surface coating of miscellaneous metal parts and products within each subcategory as defined in 40 CFR 63.3881(a), paragraphs (2) through

(1) All coating operations as defined in 40 CFR 63.3981;
(2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;
(3) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and
(4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.

(d) Terminology used in this section are defined in the CAA, in 40 CFR Part 63, Section 63.2, and in 40 CFR 63.3980, and are applicable to the affected source.

D.1.4 PSD Minor Limit [326 IAC 2-2]

Pursuant to 326 IAC 2-2, all the paint booth facilities identified in Facility Description D.1, except the four anti-chip spray booths, shall use less than 239 tons of VOC per 12 consecutive month period. This usage limit, along with the combined potential for boilers B-1 and B-2, and insignificant welding operations, degreasing operations, and paint booth P-2-5C to emit 11 tons of VOC per 12 consecutive month period, shall make 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.1.5 Particulate Matter (PM) [40 CFR 52 Subpart P]

Pursuant to 40 CFR 52 Subpart P, the PM from the spray booths P-1-2, P-1-3, P-1-4, P-2-2, P-2-3, P-2-4, P-2-5A, P-2-5B, P-1-5, and P-2-6 shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.6 Particulate [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), particulate from the paint booths P-1-2, P-1-3, P-1-4, P-2-2, P-2-3, P-2-4, P-2-5A, P-2-5B, P-1-5, and P-2-6 shall be controlled by dry filters and the Permittee shall operate the control device in accordance with manufacturer's specifications. This requirement to operate the control is not federally enforceable.

D.1.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.1.8 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.1.5 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.9 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.10 VOC Emissions

Compliance with Condition D.1.4 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.11 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks S-1-2A, S-1-2B,S-1-3A, S-1-3B, S-1-4, S-1-5, S-2-2A, S-2-2B, S-2-3A, S-2-3B, S-2-4, S-2-5A, S-2-5B, and S-2-6A, while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a deviation from this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a deviation from this permit.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.12 Record Keeping Requirements

(a) To document compliance with Conditions D.1.1 and D.1.4 the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken daily or monthly, as specified below, and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.1.1 and D.1.4.

(1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) A log of the dates of use;

(3) A. The volume weighted VOC content of the clear coatings used for each day for paint booths P-1-3, P-1-4, P-1-5 P-2-3, P-2-4, P-2-5A, and P-2-5B

B. The volume weighted VOC content of non-clear or air-dried coatings for each day for paint booths P-1-4, P-1-5 and P-2-6.

C. The volume weighted VOC content of the coatings used for each day for each coating production line 1 and 2.

(4) The cleanup solvent usage for each month

(5) The total VOC usage for each month and

(6) The weight of VOCs emitted for each compliance period.

(b) To document compliance with Condition D.1.11, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.13 Notification Requirements [40 CFR 63.3910]

(a) General. The Permittee must submit the applicable notifications in 40 CFR Part 63, Sections 63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) by the dates specified in those sections, except as provided in 40 CFR 63.3910, paragraphs (b) and (c).

(b) Initial notification. The Permittee must submit the initial notification no later than 1 year after the effective date of 40 CFR Part 63, Subpart MMMM.

(c) Notification of compliance status. The Permittee must submit the notification of compliance status required by 40 CFR 63.9(h) no later than 30 calendar days following the end of the initial compliance period described in 40 CFR Part 63, Sections 63.3940, 63.3950, or 63.3960 that applies to the affected source. The notification of compliance status must contain the information specified in 40 CFR 63.3910(c), paragraphs (1) through (11) and any additional information specified in 40 CFR 63.9(h).

D.1.14 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

The Permittee shall submit an application for a significant permit modification to IDEM, OAQ to include information regarding which compliance option or options will be chosen in the Part 70 permit.

(a) The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient for IDEM, OAQ to incorporate into the Part 70 permit the applicable requirements of 40 CFR 63, Subpart MMMM, a description of the affected source and activities subject to the standard, and a description of how the Permittee will meet the applicable requirements of the standard.

(b) The significant permit modification application shall be submitted no later than twenty-seven months after the effective date of 40 CFR 63, Subpart MMMM.

(c) The significant permit modification application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

D.1.15 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.4 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD)
for a
Significant Source Modification and a Significant Permit Modification
to a Part 70 Operating Permit

Source Background and Description

Source Name:	Master Guard Corporation
Source Location:	1200 East Eighth St., Veedersburg, IN 47987
County:	Fountain
SIC Code:	3465
Part 70 Permit No.:	T045-10130-00011
Date Issued:	April 23, 2001
Significant Source Modification No.:	045-18044-00011
Significant Permit Modification No.:	045-18180-00011
Permit Reviewer:	RT/ EVP

The Office of Air Quality (OAQ) has reviewed a Significant Source Modification and Significant Permit Modification permit application from Master Guard Corporation, relating to the operation of their existing stationary automotive bumper manufacturing plant

History

Master Guard was issued Part 70 operating permit T045-10130-00011, on April 23, 2001. On October 07, 2003, Master Guard Corporation submitted an application to OAQ requesting a significant source and permit modification to install two new booths on the existing coating lines, MG1 and MG2.

Explanation of Modification Requested

On October 7, 2003, the Master Guard Corporation submitted a request to install:

(a) Two (2) anti-chip coat booths, together identified as P-1-5 in production line 1, with a maximum capacity of 180 nominal parts per hour, equipped with dry filters DF-1-5A and DF-1-5B, and exhausting through stack S-1-5;

(b) Two (2) anti-chip coat booths, together identified as P-2-6 in the production line 2, with a maximum capacity of 180 nominal parts per hour, equipped with dry filters DF-2-6A and DF-2-6B, and exhausting through stacks S-2-6A and S-2-3B; and

(c) Two (2) 2.5 MMBtu/hr natural gas-fired curing ovens.

The existing source is a major Part 70 source for PM and VOC, major Part 63 source and minor PSD source. After the installation of the proposed equipment, the facility will become a major PSD source pursuant to 326 IAC 2-2 because the source wide PTE VOC will be greater than 250 Tons

per year.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities in this modification review process.

Existing Approvals

The source was issued a Part 70 Operating Permit T045-10130-00011 on April 23, 2001. The source has since received the following:

(a) First Minor source Modification No.: MSM 045-11822-00011, issued on March 15, 2000; and

(b) First Administrative Amendment No.: 045-15667-00011, issued on March 11, 2002.

Enforcement Issue

There are no enforcement actions associated with the equipment proposed in this modification.

Stack Summary

Stack ID	Operation	Height (feet)	Stack Shape	Diameter (inch)	Flow Rate (cfm)	Temperature (^{0}F)
S-1-5-A	Anti-chip coat booths	12	Round	30	24,000	Ambient
S-1-5B	Anti-chip coat booths	12	Round	30	24,000	Ambient
S-2-6A	Anti-chip coat booths	12	Round	30	24,000	Ambient
S-2-6B	Anti-chip coat booths	12	Round	30	24,000	Ambient

Recommendation

The staff recommends to the Commissioner that the Significant Source Modification and Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 7, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (five (5) pages).

Potential To Emit Before Controls for the Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA."

This table reflects the PTE before controls due to the modification based on the above estimated emissions calculations. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	29.96
PM-10	27.18
SO_2	-
VOC	33.1
CO	1.8
NO_x	2.2

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAPs	Potential To Emit (tons/year)
Worst Case Single HAP	2.51
Combined HAPs	5.02

Since the VOC PTE exceeds the applicable level of 25 tons per year, the proposed modification shall be approved via a significant source modification pursuant to 326 IAC 2-7-10.5(f)(4) and (6).

Justification for Modification

The Part 70 operating permit is being modified through both a Part 70 Significant Source Modification and Significant Permit Modification. These modifications are being performed based on the following justification:

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of volatile organic compounds (VOC) and PM are equal to or greater than 25 tons per year. The source is subject to the provisions of 326 IAC 2-7. Therefore, the source is subject to the provisions of 326 IAC 2-7-10.5(f)(4) for this significant source modification.

(b) The proposed operating conditions shall be incorporated into the Part 70 Operating Permit as a Significant Permit Modification (No. 045-18180-00011) in accordance with 326 IAC 2-7-12(d). The Significant Permit Modification will give the source approval to operate the proposed emission units.

County Attainment Status

The source is located in Fountain County.

Pollutant	Status
PM_{10}	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Fountain County has been designated as attainment or unclassifiable for ozone. Therefore, the VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration, 326 IAC 2-2.

(b) Fountain County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects calendar year 2001 emissions, based upon the Indiana Air Emission Summary Data for criteria pollutants.

Pollutant	Emissions (ton/yr)
PM	8
PM10	8
SO_2	0
VOC	176
CO	1
NO_x	2

Existing Source Status

Existing Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/or as otherwise limited):

Unit	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Worst Case Single HAP (tons/yr)	Comb. HAPs (tons/yr)
Source	>100	>100	<100	<100	>100, <250	<100	>10	>25
PSD Major Levels	250	250	250	250	250	250	-	-
Part 70 Major Levels	-	100	100	100	100	100	10	10/25

(a) This existing source is not a major PSD stationary source because the source criteria pollutant emissions are, after all applicable limits and standards, are less than or limited to less than the respective major source levels of 250 tons per year, and it is not one of the 28 listed source categories.

(b) These emissions are based upon application and technical support document for Part 70 permit No.T045-10130-00011, issued on April 23, 2001.

Potential to Emit After Controls for the Modification

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units for the modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	NO_X	VOC	CO	HAPs
Booths P-1-5	13.48	13.48	0.00	0.00	16.5	0.00	2.51 (Single) 5.02 (Total)
Booths 1-2-6	13.48	13.48	0.00	0.00	16.5	0.00	2.51 (Single) 5.02 (Total)
Nat. Gas Cure Oven	0.00	0.2	0.00	2.2	0.1	1.8	Negligible
Total Emissions	26.96	27.16	0.00	2.2	33.1	1.8	5.02
PSD threshold levels	250	250	250	250	250	250	-

This modification to an existing minor PSD source is not major because the emission increase after the modification is less than the PSD threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements continue to not apply.

Emissions After the Modification

Unit	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Worst Case Single HAP (tons/yr)	Comb. HAPs (tons/yr)
Source	<100	<100	<100	<100	>250	<100	>10	>25

PSD Major Levels	250	250	250	250	250	250	-	-
Part 70 Major Levels	-	100	100	100	100	100	10	10/25

The potential to emit of this source after the proposed modification is above the PSD major level. Therefore, this source is a major source pursuant to 326 IAC 2-2, after the modification.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source due to this modification.

40 CFR 63, Subpart MMMM

(a) The provisions of 40 CFR Part 63, Subpart MMMM (National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products) apply to the affected source (anti-chip booths P-1-5 and P-2-6 and all the paint booths identified in facility description D.1) because the potential HAP emissions from the source are greater than the major source thresholds of 10 tons per year (for single HAP)/25 tons per year (for combination of HAPS) and also meets the definition of a miscellaneous metal parts and products surface coating facility . A copy of this rule is available on the US EPA Air Toxics Website at http://www.epa.gov/ttn/atw/misc/miscpg.html. Pursuant to 40 CFR 63.3883(b), the Permittee must comply with these requirements on and after the date 3 years after the effective date of 40 CFR Part 63, Subpart MMMM.

(b) The provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the affected source (anti-chip booths P-1-5 and P-2-6 and all the paint booths identified in facility description D.1), except when otherwise specified by Table 2 to 40 CFR Part 63, Subpart MMMM. The Permittee must comply with these requirements on and after the effective date of the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products.

(c) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.

(d) The affected source is the collection of all of the items listed in 40 CFR 63.3882, paragraphs (b)(1) through (4) that are used for surface coating of miscellaneous metal parts and products within each subcategory as defined in 40 CFR 63.3881(a), paragraphs (2)

through (6).

(1) All coating operations as defined in 40 CFR 63.3981;
(2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;
(3) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and
(4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.

Terminology used in this section are defined in the CAA, in 40 CFR Part 63, Section 63.2, and in 40 CFR 63.3980, and are applicable to the affected source.

40 CFR 64, Compliance Assurance Monitoring

(a) The requirements of 40 CFR Part 64, Compliance Assurance Monitoring, apply to a pollutant-specific emissions unit (PSEU), as defined in 40 CFR 64.1, at a major source that is required to obtain a Part 70 or 71 permit if the PSEU meets the following criteria:

(1) the unit is subject to an emission limitation or standard for an applicable regulated air pollutant,

(2) the unit uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard, and

(3) the unit has a potential to emit (PTE) before controls equal to or greater than 100 percent of the amount (tons per year) of the pollutant required for a source to classified as a Part 70 major source.

This source was issued initial Part 70 permit no. T045-10130-00011, on April 23, 2001. The proposed PSEU as anti-chip booths (P-1-5, P-2-6) have no emission limitations, does not use a control device and have uncontrolled PTE less than 100 percent of the applicable major Part 70 threshold. Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable to the proposed modification.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source is still required to have a Preventive Maintenance Plan (PMP) for all emission units and control devices of the source.

326 IAC 2-2 (Prevention of Significant Deterioration):

This modification to an existing minor stationary source is not major because the potential to emit of criteria pollutants is less than the PSD major modification thresholds. However, the source will become a major stationary source after the modification because the VOC shall be emitted at a rate of 250 tons per year or more.

326 IAC 2-6 (Emission Reporting):

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of VOC. Pursuant to this rule, the owner/operator of the source

must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 2-4.1-1 (New Source Toxics Control)

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new source, process, or emission unit which is constructed after July 27, 1997 and has single and combined HAP potential to emit (PTE) greater than 10 and 25 tons per year, respectively, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT).

The proposed anti-chip booths, identified as P-1-5 and P-2-6, are not subject to this rule because they are subject to 40 CFR 63, Subpart MMMM, NESHAP requirements.

326 IAC 8-1-6 (General Reduction Requirements)

326 IAC 8-1-6 (General Reduction Requirements) applies to facilities not regulated by other rules in Article 8 with potential VOC emissions equal to or greater than 25 tons per year.

The proposed anti-chip booths are subject to 326 IAC 8-2-9 (Miscellaneous Metal Parts). Therefore, the anti-chip booths (P-1-5, P-2-6) are not subject to the requirements of 326 IAC 8-1-6.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

The anti-chip spray booths, identified as P-1-5 & P-2-6, are subject to the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating) because the potential volatile organic compound (VOC) emissions are greater than fifteen (15) pounds per day and the source's Standard Industrial Classification Code is one of the listed codes in this rule.

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating delivered to the applicator at the anti-chip spray booths P-1-5 and P-2-6 shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for extreme performance coatings.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized. Based on the MSDS submitted by the source and calculations made, the spray booth is in compliance with this requirement. (See pages 1, 2 of TSD, Appendix A).

326 IAC 6-3-2 (Process Operations)

Pursuant to 40 CFR 52 Subpart P, the PM from the anti-chip booths, P-1-5 and P-2-6, shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

326 IAC 6-3-2 (d) (Particulate)

Pursuant to 326 IAC 6-3-2(d), particulate from the paint booths P-1-2, P-1-3, P-1-4, P-2-2, P-2-3, P-2-4, P-2-5A, P-2-5B, P-1-5, and P-2-6 shall be controlled by dry filters and the Permittee shall operate the control device in accordance with manufacturer's specifications. This requirement to operate the control is not federally enforceable.

326 IAC 6-2-4

The Two (2) 2.5 MMBtu/hr natural gas-fired curing ovens, which are insignificant activities, are not indirect heating units. Therefore, pursuant to 326 IAC 6-1, they are not subject to the requirements of 326 IAC 6-2-4 (Particulate emissions limitations for sources of indirect heating).

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

(a) The anti-chip spray booths, identified as P-1-5 and P-2-6, have applicable compliance monitoring conditions as specified below:

(1) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stack while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

(2) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

(3) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

These monitoring conditions are necessary because the dry filters for the spray booths must operate properly to ensure compliance with 40 CFR 52 Subpart P and 326 IAC 2-7.

Changes to the Part 70 Permit Due to This Modification:

The following changes are made as the Significant Source/Permit Modifications to Part 70 No. 045-10130-00011. New language is shown in **bold** and deleted language is shown with a ~~line through it~~ for emphasis). The Table of Contents is also revised as necessary, without replication herein.

1. Section A.2 (Emission Units and Pollution Control Equipment Summary) is revised to reflect the equipment addition for this modification, as follows:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(a) An electrodeposition dip coat process, identified as P-1-1 in production line 1, with a maximum capacity of 180 nominal parts per hour, and internally vented

(b) Two clearcoat booths, together identified as P-1-3 in production line 1, with a maximum total capacity of 180 nominal parts per hour, equipped with two dry filters DF-1-3A and DF-1-3B, and exhausting through stacks S-1-3A and S-1-3B

(c) An undercoat spray booth, identified as P-1-4, with a maximum capacity of 180 nominal parts per hour, equipped with a dry filter DF-1-4, and exhausting through stack S-1-4

(d) Two natural gas fired boilers, identified as B-1 and B-2, each rated at 11.5 million British thermal units (MMBtu) per hour, and exhausting at stacks S-2-5 and S-2-6, respectively

(e) Two basecoat spray booths, together identified as P-1-2 in production line 1, with a total maximum capacity of 180 nominal parts per hour, equipped with two dry filters DF-1-2A and DF-1-2B, and exhausting through stacks S-1-2A and S-1-2B

(f) An electrodeposition dip coat process, identified as P-2-1 in production line 2, with a maximum capacity of 180 nominal parts per hour, and internally vented

(g) Two basecoat spray booths, together identified as P-2-2 in production line 2, with a maximum total capacity of 180 nominal parts per hour, equipped with two dry filters DF-2-2A and DF-2-2B, and exhausting through stacks S-2-2A and S-2-2B

(h) Two clearcoat booths, together identified as P-2-3 in production line 2, with a maximum total capacity of 180 nominal parts per hour, equipped with two dry filters DF-2-3A and DF-2-3B, and exhausting through stacks S-2-3A and S-2-3B

(i) An undercoat spray booth, identified as P-2-4, with a maximum capacity of 180 nominal parts per hour, equipped with a dry filter DF-2-4, and exhausting through stack S-2-4

(j) Two decorative chrome plating tanks, identified as CN-1 and CS-1, each with a maximum capacity of 180 nominal bumpers per hour, using fume suppressant and scrubbers SCN-1 and SCS-1 as control and exhausting through stack S-3-1. Operation of the scrubber is not required for compliance.

(k) Two (2) spray booths applying clear undercoatings, identified as emission units P-2-5A and P-2-5B, each with a maximum capacity of 180 nominal parts per hour, with particulate matter emissions controlled by dry filters, and exhausting from stack vents S-2-5A and S-2-5B, respectively

(l) Two chrome anodizing tanks, identified as CN-25 and CS-25, each with a maximum capacity of 90 nominal bumpers per hour, using a wetting agent and scrubbers SCN-1 and SCS-1 as control and exhausting through stack S-3-1. Operation of the scrubber is not required for compliance.

(m) Two (2) anti-chip coat booths, together identified as P-1-5 in production line 1, with a maximum capacity of 180 nominal parts per hour, equipped with dry filters DF-1-5A and DF-1-5B, and exhausting through stack S-1-5; and

(n) Two (2) anti-chip coat booths, together identified as P-2-6 in the production line 2, with a maximum capacity of 180 nominal parts per hour, equipped with dry filters DF-2-6A and DF-2-6B, and exhausting through stacks S-2-6A and S-2-3B.

2. Section D.1 (facility description and operating conditions) are revised to reflect the equipment addition for this modification, as follows:

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(a) An electrodeposition dip coat process, identified as P-1-1 in production line 1, with a maximum capacity of 180 nominal parts per hour, and internally vented

(b) Two clearcoat booths, together identified as P-1-3 in production line 1, with a maximum total capacity of 180 nominal parts per hour, equipped with two dry filters DF-1-3A and DF-1-3B, and exhausting through stacks S-1-3A and S-1-3B

(c) An undercoat spray booth, identified as P-1-4, with a maximum capacity of 180 nominal parts per hour, equipped with a dry filter DF-1-4, and exhausting through stack S-1-4

(e) Two basecoat spray booths, together identified as P-1-2 in production line 1, with a total maximum capacity of 180 nominal parts per hour, equipped with two dry filters DF-1-2A and DF-1-2B, and exhausting through stacks S-1-2A and S-1-2B

(f) An electrodeposition dip coat process, identified as P-2-1 in production line 2, with a maximum capacity of 180 nominal parts per hour, and internally vented

(g) Two basecoat spray booths, together identified as P-2-2 in production line 2, with a maximum total capacity of 180 nominal parts per hour, equipped with two dry filters DF-2-2A and DF-2-2B, and exhausting through stacks S-2-2A and S-2-2B

(h) Two clearcoat booths, together identified as P-2-3 in production line 2, with a maximum total capacity of 180 nominal parts per hour, equipped with two dry filters DF-2-3A and DF-2-3B, and exhausting through stacks S-2-3A and S-2-3B

(i) An undercoat spray booth, identified as P-2-4, with a maximum capacity of 180 nominal parts per hour, equipped with a dry filter DF-2-4, and exhausting through stack S-2-4

(j) Two (2) spray booths applying clear undercoatings, identified as emission units P-2-5A and P-2-5B, each with a maximum capacity of 180 nominal parts per hour, with particulate matter emissions controlled by dry filters, and exhausting from stack vents S-2-5A and S-2-5B, respectively

(k) Two (2) anti-chip coat booths, together identified as P-1-5 in production line 1, with a maximum capacity of 180 nominal parts per hour, equipped with dry filters DF-1-5A and DF-1-5B, and exhausting through stack S-1-5; and

(l) Two (2) anti-chip coat booths, together identified as P-2-6 in the production line 2, with a maximum capacity of 180 nominal parts per hour, equipped with dry filters DF-2-6A and DF-2-6B, and exhausting through stacks S-2-6A and S-2-3B

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 326 IAC 8-2-9 (Miscellaneous Metal Coating)

(a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) and 326 IAC 8-1-2(a)(7) (VOC Compliance methods), compliance with VOC content of 4.3 pounds of VOC per gallon of coating less water for all clear coatings applied in each spray booth P-1-4, P-2-4, P-2-5A, and P-2-5B shall be based on daily volume-weighted averages, using the following equation:

A = ? (C * U) / ? U ? 4. 3 lb VOC/gal

Compliance with VOC content of 3.5 pounds of VOC per gallon of coating less water for all non-clear or air-dried coatings delivered at spray booth P-1-4 shall be based on daily volume-weighted averages, using the following equation:

A = ? (C * U) / ? U ? 3.5 lb VOC/gal

A = Daily volume weighted average in pounds of VOC per gallon of coating, less water
C = VOC content of coating in pounds of VOC per gallon of coating, less water
U = usage rate of coating in gallons per day

(b) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) and 326 IAC 8-1-2(a)(7) (VOC Compliance methods), compliance with VOC content of 3.5 pounds of VOC per gallon of coating less water for all extreme performance coatings applied in spray booths P-1-2**,** ~~and~~ P-2-2, **P-1-5 and P-2-6** and electrodeposition dip booths P-1-1 and P-2-1, and a VOC content of 4.3 pounds of VOC per gallon of coating less water for all clearcoatings applied in spray booths P-1-3 and P-2-3, shall be based on daily volume-weighted averages, using the following equations:

For Line 1:

? (C_a * U) ? ? (C_l * U)

C_a = actual VOC content of coating in pounds of VOC per gallon of coating, less water
C_l = limited VOC content of coating in pounds of VOC per gallon of coating, less water
P-1-1 limit is 3.5 lb/gal P-1-2 limit is 3.5 lb/gal P-1-3 limit is 4.3 lb/gal **P-1-5 limit is 3.5 lb /gal**
U = actual usage rate of coating in gallons per day

For Line 2:

? (C_a * U) ? ? (C_l * U)

C_a = actual VOC content of coating in pounds of VOC per gallon of coating, less water
C_l = limited VOC content of coating in pounds of VOC per gallon of coating, less water
P-2-1 limit is 3.5 lb/gal P-2-2 limit is 3.5 lb/gal P-2-3 limit is 4.3 lb/gal **P-2-6 limit is 3.5 lb/ gal**
U = actual usage rate of coating in gallons per day

(c) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

(d) The requirement from CP 045-2458, issued April 6, 1992,

" The VOC content of the coating delivered to the applicator shall not exceed 3.5 pounds per gallon, less water, pursuant to the rule"

is not applicable because the applicators are delivering different coatings than those to which the requirement referred. Conditions D.1.1. (a) and (b) satisfy the requirements of 326 IAC 8-2-9.

D.1.2 General Provisions Relating to HAPs [326 IAC 20-1][40 CFR Part 63, Subpart A] [Table 2 to 40 CFR Part 63, Subpart MMMM] [40 CFR 63.3901]

(a) The provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to affected source (all the paint booth facilities identified in Facility Description D.1), except when otherwise specified by Table 2 to 40 CFR Part 63, Subpart MMMM. The Permittee must comply with these requirements on and after the effective date of the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products.

(b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.

D.1.3 National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products [40 CFR Part 63, Subpart MMMM] [40 CFR 63.3882] [40 CFR 63.3883] [40 CFR 63.3980]

(a) The provisions of 40 CFR Part 63, Subpart MMMM (National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products) apply to affected source (all the paint booth facilities identified in Facility Description D.1). A copy of this rule is available on the US EPA Air Toxics Website at http://www.epa.gov/ttn/atw/misc/miscpg.html. Pursuant to 40 CFR 63.3883(b), the Permittee must comply with these requirements on and after the date 3 years after the effective date of 40 CFR Part 63, Subpart MMMM.

(b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.

(c) The affected source is the collection of all of the items listed in 40 CFR 63.3882, paragraphs (b)(1) through (4) that are used for surface coating of miscellaneous metal parts and products within each subcategory as defined in 40 CFR 63.3881(a), paragraphs (2) through

(1) All coating operations as defined in 40 CFR 63.3981;
(2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;
(3) All manual and automated equipment and containers used for conveying

coatings, thinners and/or other additives, and cleaning materials; and

(4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.

(d) Terminology used in this section are defined in the CAA, in 40 CFR Part 63, Section 63.2, and in 40 CFR 63.3980, and are applicable to the affected source.

D.1.~~2~~ **4** PSD Minor Limit [326 IAC 2-2] ~~[40 CFR 52.21]~~

Pursuant to 326 IAC 2-2 ~~and 40 CFR 52.21~~, all the paint booth facilities identified in Facility Description D.1, **except the four (4) anti-chip spray booths**, shall use less than 239 tons of VOC per 12 consecutive month period. This usage limit, along with the combined potential for boilers B-1 and B-2, and insignificant welding operations, degreasing operations, and paint booth P-2-5C to emit 11 tons of VOC per 12 consecutive month period, shall make 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.1.~~3~~ **5** Particulate Matter (PM) ~~[326 IAC 6-3-2(c)]~~ **[40 CFR 52 Subpart P]**

Pursuant to ~~326 IAC 6-3-2(c)~~ **40 CFR 52 Subpart P**, the PM from the spray booths P-1-2, P-1-3, P-1-4, P-2-2, P-2-3, P-2-4, P-2-5A, P-2-5B, **P-1-5, and P-2-6** shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation ~~and extrapolation~~ of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.~~8~~ **6** Particulate ~~Matter (PM)~~ **[326 IAC 6-3-2(d)]**

~~Dry filters for PM control shall be in operation at all times when the~~ **Pursuant to 326 IAC 6-3-2(d)**, **particulate from the** paint booths P-1-2, P-1-3, P-1-4, P-2-2, P-2-3, P-2-4, P-2-5A, ~~and~~ P-2-5B, **P-1-5, and P-2-6** ~~are in operation.~~ **and the Permittee shall operate the dry filters in accordance with manufacturer's specifications. This requirement to operate the control is not federally enforceable**.

D.1.~~4~~ **7** Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.1.~~5~~ **8** Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition ~~D.1.3~~ **D.1.5** shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.~~6~~ **9** Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Condition D.1.1 shall be

determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.~~7~~ **10** VOC Emissions

Compliance with Condition ~~D.1.2~~ **D.1.4** shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period**.**

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.~~9~~ **11** Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks S-1-2A, S-1-2B,S-1-3A, S-1-3B, S-1-4, **S-1-5**, S-2-2A, S-2-2B, S-2-3A, S-2-3B, S-2-4, S-2-5A, ~~and~~ S-2-5B, **and S-2-6A**, while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a ~~violation of~~ **deviation from** this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a ~~violation of~~ **deviation from** this permit.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.~~10~~ **12** Record Keeping Requirements

(a) To document compliance with Conditions D.1.1 and ~~D.1.2~~ **D.1.4** the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken daily or monthly, as specified below, and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.1.1 and ~~D.1.2~~ **D.1.4.**

(1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) A log of the dates of use;

(3) A. The volume weighted VOC content of the clear coatings used for each day for

paint booths P-1-3, P-1-4, P-1-5 P-2-3, P-2-4, P-2-5A, and P-2-5B

B. The volume weighted VOC content of non-clear or air-dried coatings for each day for paint booths P-1-4, **P-1-5 and P-2-6.**

C. The volume weighted VOC content of the coatings used for each day for each coating production line 1 and 2.

(4) The cleanup solvent usage for each month

(5) The total VOC usage for each month and
(6) The weight of VOCs emitted for each compliance period.

(b) To document compliance with Condition ~~D.1.9~~ **D.1.11**, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.13 Notification Requirements [40 CFR 63.3910]

(a) General. The Permittee must submit the applicable notifications in 40 CFR Part 63, Sections 63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) by the dates specified in those sections, except as provided in 40 CFR 63.3910, paragraphs (b) and (c).

(b) Initial notification. The Permittee must submit the initial notification no later than 1 year after the effective date of 40 CFR Part 63, Subpart MMMM.

(c) Notification of compliance status. The Permittee must submit the notification of compliance status required by 40 CFR 63.9(h) no later than 30 calendar days following the end of the initial compliance period described in 40 CFR Part 63, Sections 63.3940, 63.3950, or 63.3960 that applies to the affected source. The notification of compliance status must contain the information specified in 40 CFR 63.3910(c), paragraphs (1) through (11) and any additional information specified in 40 CFR 63.9(h).

D.1.14 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

The Permittee shall submit an application for a significant permit modification to IDEM, OAQ to include information regarding which compliance option or options will be chosen in the Part 70 permit.

(a) The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient for IDEM, OAQ to incorporate into the Part 70 permit the applicable requirements of 40 CFR 63, Subpart MMMM, a description of the affected source and activities subject to the standard, and a description of how the Permittee will meet the applicable requirements of the standard.

(b) The significant permit modification application shall be submitted no later than twenty-seven months after the effective date of 40 CFR 63, Subpart MMMM.

(c) The significant permit modification application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

~~D.1.11~~ **15** Reporting Requirements

A quarterly summary of the information to document compliance with Condition ~~D.1.2~~ **D.1.4** ~~and D.1.7~~ shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

3. The Table of Contents shall be modified to reflect the conditions that have been added.

4. Reason for the removal of 40 CFR 52.21 from PSD Minor Limit Condition:

On March 3, 2003, U.S.EPA published a notice for "Conditional Approval of Implementation Plan: Indiana" in the Federal Register / Vol. 68, No.41 at pages 9892 through 9895. This notice grants conditional approval to the PSD State Implementation Plan (SIP) under provisions of 40 CFR §§51.166 and 40 CFR §§52.770 while superceding the delegated PSD SIP authority under 40 CFR §§52.793. The effective date for these provisions is April 2, 2003. Therefore, the PSD permits will be issued under the authority of 326 IAC 2-2 and will no longer be issued under the provision of 40 CFR 52.21 and 40 CFR 124.

Conclusion

The operation of the four anti-chip booths, identified as P-1-5 and P-2-6, operation shall be subject to the conditions of the attached proposed Significant Source Modification 045-18044-00011 and Significant Permit Modification 045-18180-00011.

Potential VOC Emissions from Anti-Chip Booths P-1-5 & P-2-6

Company Name: Master Guard Corporation
Address City IN Zip: 1200 East Eighth Street Veedersburg IN 47987
Part 70 Pemit: 045-10130-00011
Minor Source Modification No.: 045-18044-00011
Minor Permit Modification No.: 045-18180-00011
Reviewer: RT/EVP

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	Transfer Efficiency
Booths P-1-5 / Generic Gray Color	10.4	32.87%	0.0%	32.9%	0.0%	0.00610	180.000	3.43	3.43	3.77	90.43	16.50	13.48	60%
Booths P-1-6 / Generic Gray Color	10.4	32.87%	0.0%	32.9%	0.0%	0.00610	180.000	3.43	3.43	3.77	90.43	16.50	13.48	60%
ate Potential Emissions				**Add worst case coating to all solvents**						**7.54**	**180.86**	**33.01**	**26.96**	

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Potential HAP Emissions from Anti-Chip Booths P-1-5 & P-2-6

Company Name: Master Guard Corporation
Address City IN Zip: 1200 East Eighth Street Veedersburg IN 47987
Part 70 Pemit: 045-10130-00011
Minor Source Modification No.: 045-18044-00011
Minor Permit Modification No.: 045-18180-00011
Reviewer: RT/EVP

Material	Density	Gallons of Material	Maximum	Weight %	Weight %	Weight %	Weight %	Xylene Emissions	Toluene Emissions	Ethyl Benzene Emissions	Glycol Ethers Emissions	Total HAPS
	(Lb/Gal)	(gal/unit)	(unit/hour)	Xylene	Toluene	Ethyl Benzene	Glycol Ethers	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	
Booths P-1-5 / Generic Gray Color	10.44	0.006100	180.00	2.50%	0.00%	2.50%	0.00%	1.26	0.00	1.26	0.00	2.51
Booths P-1-6 / Generic Gray Color	10.44	0.006100	180.00	2.50%	0.00%	2.50%	0.00%	1.26	0.00	1.26	0.00	2.51
Total State Potential Emissions								**2.51**	**0.00**	**2.51**	**0.00**	**5.02**

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emissions Calculations

Potential Emissions from Natural Gas Combustion
MM BTU/HR <100

Company Name: Master Guard Corporation
Address City IN Zip: 1200 East Eighth Street Veedersburg IN 47987
Part 70 Pemit: 045-10130-00011
Minor Source Modification No.: 045-18044-00011
Minor Permit Modification No.: 045-18180-00011
Reviewer: RT/EVP

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
5.0	43.8

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.0	0.2	0.0	2.2	0.1	1.8

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).
See page 2 for HAPs emissions calculations.

Appendix A: Emissions Calculations

Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Curing Oven
HAPs Emissions

Company Name: Master Guard Corporation
Address City IN Zip: 502 east Anthony Drive
Part 70 Permit: 045-10130-00011
Minor Source Modification No.: 045-18044-00011
Minor Permit Modification No.: 045-18180-00011
Reviewer: RT/EVP

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	4.599E-05	2.628E-05	1.643E-03	3.942E-02	7.446E-05

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.095E-05	2.409E-05	3.066E-05	8.322E-06	4.599E-05

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Potential Emissions from Entire Modification (P-1-5+ P-1-6+ Nat. Gas Combustion)

Company Name: Master Guard Corporation
Address City IN Zip: 1200 East Eighth Street Veedersburg IN 47987
Part 70 Pemit: 045-10130-00011
Minor Source Modification No.: 045-18044-00011
Minor Permit Modification No.: 045-18180-00011
Reviewer: RT/EVP

Emission Unit	PM	PM-10	SO2	NOx	VOC	CO	Single	HAPS
	(tons / yr)	(tons / yr)	(tons / yr)	(tons / yr)	(tons / yr)	(tons / yr)	HAP	(tons / yr)
Booth P-1-5	13.48	13.48	0	0	16.5	0	1.26 (Xylene, Ethyl Benzene)	2.51
Booth P-2-6	13.48	13.48	0	0	16.5	0	1.26 (Xylene, Ethyl Benzene)	2.51
Nat.Gas Cure Oven	0	0.2	0	2.2	0.1	1.8	negligible	0.0041
Total	26.96	27.16	0	2.2	33.1	1.8		5.0241